

S/N 09/135,413

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

Applicant: Leonard Forbes et al.

Examiner: Viet Q. Nguyen

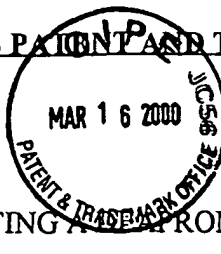
Serial No.: 09/135,413

Group Art Unit: 2818

Filed: August 14, 1998

Docket: 303.354US2

Title: METHOD FOR OPERATING A TRANSISTOR FROM HAVING AN AMORPHOUS SILICON CARBIDE GATE INSULATOR



#16/E

fee ok

3-23-00

L. Spruell

AMENDMENT AND RESPONSE

Assistant Commissioner for Patents
Washington, D.C. 20231

Applicant has reviewed the Office Action mailed on December 13, 1999. Please amend the above-identified patent application as follows.

IN THE CLAIMS

Please amend the following claim:

5
29. (Twice Amended) The method of claim 28 wherein programming [the] a floating gate [transistor] electrode further comprises causing hot electron injection from the channel through an amorphous silicon carbide (a-SiC) gate insulator to the floating gate electrode.

Please add the following new claims:

36
64. (New) A method of using a floating gate transistor, comprising:
programming a floating gate electrode of the floating gate transistor by placing a charge on the floating gate electrode, wherein the floating gate transistor has a barrier energy between the floating gate electrode and a silicon carbide (SiC) gate insulator separating the floating gate electrode from a substrate, the barrier energy being less than approximately 3.3 eV;
reading the floating gate transistor by placing a read voltage on a control gate and detecting current in a channel between a source region and a drain region in the substrate; and erasing the floating gate transistor.